

Appendix D – Hydrologic Design Report Format

6.D.1 Introduction

Hydrologic studies for all watersheds greater than 81 ha (200 acres) shall be documented using the following report formats. For smaller areas, the degree of report documentation shall be commensurate with the complexity of the associated hydraulic design.

6.D.2 Submittal

Preliminary hydrologic studies should be completed as early as possible during the design phase of a project. Studies completed should initially be documented in accordance with the report format and submitted for review by the Hydraulics and Drainage Section. Following this review, and upon incorporation of recommended revisions as necessary, the hydrologic study shall be completed and the design can start.

6.D.3 Hydrologic Design Report

The following shall be included in the draft and final reports:

1. Narrative to include stream name, general basin description, location of study site, hydrologic design method used, design frequency, etc.
2. Watershed area map showing overall basin boundary and subarea delineations. The scale and overall size of this map shall be as required for the watershed under study; the map may accompany the report as a separate item.
3. Complete listing of all input data with supporting computations and materials.
4. Tabulation of regression equation results or copy of computer model printout, as applicable. Computer printouts shall include complete input data and the resultant, unabbreviated output.
5. Flood frequency curves.
6. Information regarding the flood of record with associated high water marks, if available. Describe any unique circumstances which caused or contributed to the flood of record, such as an upstream dam break, high tailwater condition downstream, or debris blockage at the site.
7. Brief narrative summary of study results.
8. A copy of the computer disk(s).
9. The signature with Connecticut seal and professional engineer number of the approved hydraulic engineer who prepared or supervised the preparation of the report. The report shall also include the names identifying the responsible engineers who prepared and checked the work.